Land Use Land Cover TWG Meeting

June 24, 2010   -   ISU Pocatello

Attendees:

Angie Schmidt	Idaho Fish and Game
Brian Holmes	Bureau of Land Management
Craig Rindlisbacher	Madison County
Dennis Hill	City of Pocatello
Jacob Mundt	Ada County
Keith Weber	Idaho State University
Lori Ames	Nez Perce Tribe Remote Sensing
Robert Smith	Idaho Geospatial Office
Roger Kassens	Idaho Transportation Department
Sonja	Idaho Fish and Game
Vera Williams	Surface Water Solutions
Wilma Robertson	Idaho Geospatial Office

Introduction – Wilma Robertson

Wilma showed a PowerPoint presentation defining the following terms:

> **Land use** is the human modification of natural environment or wilderness into built environments such as fields, pastures, and settlements.

> **Land cover** is the physical material at the surface of the earth. Land covers include grass, asphalt, trees, bare ground, water, etc. There are two primary methods for capturing information on land cover: field survey and analysis of remotely sensed imagery

> **Land tenure** is the name given, particularly in common law systems, to the legal regime in which land is owned by an individual, who is said to "hold" the land.

Discussion about how to divide LU/LC into sub-committee elements

The starting point of the discussion is depicted on the right hand side.

It is important to have agreed upon definitions for each of the elements, and then find out which datasets will satisfy those definitions.

Action item: Keith will write up definitions

We talked about what type of data was required to populate or update elements:
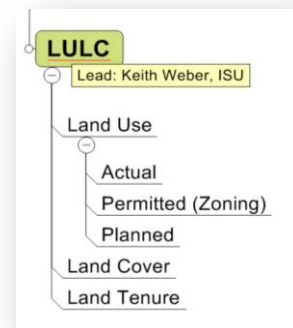
Land cover	Remotely sensed data
Land use	Remotely sensed data and existing GIS data (parcels, BLM rangeland, etc.)
Land tenure	Existing GIS data (BLM Surface Management, IDL data, etc.)

For cities, some of the parks are owned by the City.

Planned land use will be a layer that is hard to put together since each agency seems to have their comprehensive plan in a slightly different flavor.

Need to know what LULC is already available and make it easy to find and acquire. Any field data collected to help develop LULC data should also be included.
Might look at working with or helping to improve federal LULC programs that already exist: NLCD, NASS Cropland data.

Linkage between LU/LC Framework and other Frameworks

- Land use cannot be done until the parcel framework is further along.
- Land cover is determined by precipitation and soil type.
- Omernik , which is an element of the Geosciences framework could be a potential land cover
- Imagery can be used to create, or verify, land cover and land use.
- Elevation drives land cover
- Government boundaries framework data ties in with land ownership
- Hazards framework may need Land cover data
- Solar exposure (solar potential element) helps explain how dry a given area is, and hence determines land cover.

Action item: Wilma will create a matrix summarizing dependencies between different frameworks

Action item: hold a "super TWG", possibly during GIS week in October 2010, that has people from the different TWGs indicated above and discuss vertical integration.

Existing data sources and identify where additional sources are needed

Land cover:

GAP. See http://gapanalysis.nbii.gov/.PAD_US v1.1 is a national geodatabase that represents public land ownership and conservation lands.

National Land Cover Dataset (NLCD). See http://www.mrlc.gov/nlcd_multizone_map.php which will allow you to download tree canopy, urban imperviousness and land cover data.

Tax data categories may show irrigated *vs.* non-irrigated land. Idaho Department of Water Resources probably also has information about irrigated *vs.* non-irrigated.

Land tenure:

BLM's Surface Management Dataset. This data is derived from master title plats. This dataset is maintained at BLM's State Office. It uses cadastral data and is updated and "pushed up" every 6 months. The Idaho Department of Lands pushes changes up to the BLM to include in the Surface Management Dataset. This dataset only shows historic water features. Also, this dataset shows who *manages* the data, not who owns it. The dataset can be found at: http://cloud.insideidaho.org/webApps/metadataViewer/default.aspx?path=G:\data\anonymous\blm\sma_id_blm.shp.xml). This dataset may form the starting point for the land tenure framework

dataset. Pursue the possibility of having Michele Porter from the BLM take the lead on this framework element.

Integrated Property Records System maintained by the Idaho Department of Administration (see http://gis.idaho.gov/iprs/). This data shows properties *owned* and *managed* by the State of Idaho.

The Idaho Department of Transportation owns a lot of land. It is difficult for a County to keep track of State certificates.

Department of lands an online database showing endowment lands. (See http://gis1.idl.idaho.gov/DLR/)

Idaho Parks and Recreation has a GIS layer showing manager (not necessarily ownership).

It is important to keep track of whether a dataset shows land management or land ownership. Do we need two separate datasets or one dataset with attribution that shows who owns and who manages the land.

Action item: Bob Smith and Brian Holmes will compare their respective land tenure databases and report back.

The Roadmap forward

- **Priorities**: land cover and land tenure. Do land use last since it will be easier to do once the parcel TWG is further along.
- Starting point for land tenure could be the BLM Surface management data.
- Do we need different datasets for land tenure managed vs. land tenure owned?
- Do we need to hold one TWG for all LU/LC elements combined, or form sub-committees? Suggested that a TWG meeting in mostly focused on one element, and see who is interested in each element. This may indicate if and how the larger LU/LC TWG should be broken up.

Other

Jacob Mundt at Ada County as well as the Department of Agriculture use land cover information to model presence of noxious weeds.

References with "food for thought" for future meetings.

- A land use and land cover classification system for use with remote sensor data: http://landcover.usgs.gov/pdf/anderson.pdf
- A standard classification system for the mapping of land use and land cover. Prepared by the State of North Carolina. http://ncgicc.net/Portals/3/documents/nclulc.html